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# **Higher Nationals**

# **Assignment Brief – BTEC (RQF)**

**Higher National Diploma in Computing**

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| **Student Name /ID Number** | Aaron Mascarenhas |
| **Unit Number and Title** | **13 - Computing Research Project** |
| **Academic Year** | **2019-2020** |
| **Unit Assessor** | **K. Baht** |
| **Assignment Title** | **Digital Wellbeing Research Project** |
| **Issue Date** | **w/c 11/11/2019** |
| **IV Name** | **Dr Sam Al-Jajjoka** |
| **Submission date** | **19/5/2020** |
| **Re-submission date (if required)** | **w/c 22/6/2020** |

**Plagiarism**

Plagiarism is a particular form of cheating. Plagiarism must be avoided at all costs and students who break the rules, however innocently, may be penalised. It is your responsibility to ensure that you understand correct referencing practices. As a university level student, you are expected to use appropriate references throughout and keep carefully detailed notes of all your sources of materials for material you have used in your work, including any material downloaded from the Internet. Please consult the relevant unit lecturer or your course tutor if you need any further advice.

**Student Declaration**

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| **Student declaration**  I certify that the assignment submission is entirely my own work and I fully understand the consequences of plagiarism. I understand that making a false declaration is a form of malpractice.  Student signature: Aaron Date: 20/12/19 |

**Learning Outcomes and Assessment Criteria**

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|  | **Grading Criteria** | **Met** | **Grading Criteria** | **Met** | **Grading Criteria** | **Met** |  |
| LO1 | P1 |  | M1 |  |  |  |  |
| LO1 | P2 |  |  |  |  |  |  |
| LO2 | P3 |  | M2 |  |  |  |  |
| LO2 | P4 |  |  |  |  |  |  |
| LO1&2 |  |  |  |  | D1 |  |  |
| LO3 | P5 |  | M3 |  | D2 |  |  |
| LO4 | P6 |  | M4 |  | D3 |  |  |
| LO4 | P7 |  |  |  |  |  |  |

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| **Assessor Feedback:** | | | | |
| **Grade:** | **Assessor Signature:** | | | **Date:** |
| **Resubmission Feedback:** | | | | |
| **Grade:** | | **Assessor Signature:** | **Date:** | | |

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| Submission Format: |
| Submission format of tasks is written reports (short and long), project management plan using Microsoft Project, project logbook (using Google docs), research and production of a presentation with notes. With the reports you are required to make use of headings, paragraphs and subsections as appropriate, and all work must be supported with research and referenced using the Harvard referencing system. Please also provide a bibliography using the Harvard referencing system. The recommended word limit for long reports is 4000-5000 words and 500 words for short reports, although you will not be penalised for exceeding the total word limit. |
| Unit Learning Outcomes: |
| **LO1** Examine appropriate research methodologies and approaches as part of the research process  **LO2** Conduct and analyse research relevant for a computing research project  **LO3** Communicate the outcomes of a research project to identified stakeholders  **LO4** Reflect on the application of research methodologies and concepts |
| Assignment Brief and Guidance: |
| **Introduction to theme set by Pearson**  **Digital Wellbeing**  Digital wellbeing Digital Wellbeing is about fashioning and sustaining a healthy relationship with technology. As technology plays a big part in our lives we find ourselves spending an increasing amount of time online and on our devices. Our wellbeing is dependent upon our mental and physical health and thereby our digital wellbeing is influenced by our online interactions and the amount of time we spend on our devices.  Whilst technology and the internet can simplify and enhance our lives, they can also be distracting, be a cause of anxiety, and make us feel upset. Being in control of technology enables us to use its full potential and gain all the benefits of it.  This project will enable you to explore some of the areas of digital wellbeing from the standpoint of a prospective computing professional. It will provide an opportunity for you to investigate digital wellbeing within computing systems and explore the responsibilities and solutions to the problems presented.  **Choosing a research objective/question**  You are required to choose your own research topic for this unit. Strong research projects are those with clear, well focused and defined objectives. A central skill in selecting a research objective is the ability to select a suitable and focused research objective. One of the best ways to do this is to put it in the form of a question.  The range of topics discussed could cover the following:   * How to find the balance towards a healthy relationship with devices? * Are tech companies responsible for the health, safety and wellbeing of users? * What tools and strategies can a company use to develop a system(s) that addresses digital wellbeing for users? * What impact will future digital tech have on human wellbeing?   The research objective should be feasible, novel, ethical, relevant and ultimately of interest to you.  **Project Evidence / Outcomes**  It is important to recognise that your project work will reliant on gathering information/data that can be analysed. The scale of the project means that there must be time for you to conduct both primary and secondary research. **An advised model would be to use secondary research to provide a context for you to conduct and interpret primary data collection.** The project could then yield data that could be compared with the findings of secondary research information.  **Task 1 Research Proposal and Ethics Form**  You need to submit as evidence for the unit, the research proposal and ethics form.  The research proposal sets out the plan for how you will achieve the intended research objective and shows whether the objective will be feasible, ethical and achievable in the time scale. It sets out how secondary research supports the research objective, how the research will be conducted, how the research will be evaluated.  You will need to gain ethical approval before commencing research, this will need to be discussed with the tutor during the research proposal.  Using the templates to complete the relevant forms (under Project Templates section in Google Classroom)  Produce a research proposal that clearly defines a research question or hypothesis supported by a literature review.  **Evidence - Project Proposal, Research Ethics Approval Form (Date due w/c 25/11/19)**  **Introduction & Literature Review (w/c 07/01/20)**  **Task 2 (Date due w/c 13/01/20)**  Examine appropriate research methods and approaches to primary and secondary research. Produce short report.  **Task 3**  Evaluate different research approaches and methodologyand make justifications for the choice of methods you selected based on philosophical/theoretical frameworks in your project.  **Task 4 (Date due w/c 28/1/20)**  Conduct primary and secondary research using appropriate methods for your chosen Digital Wellbeing project that consider costs, access and ethical issues.  **Evidence - provide evidence of research in the form of literature used.**  **Task 5 (Date due w/c 10/3/20)**  Apply appropriate analytical tools (graphs, bar charts, histograms, scattered diagram), analyse research findings and data.  **Evidence - graphs, bar charts, histograms, scattered diagram etc**  **Task 6**  Discuss merits, limitations and pitfalls of approaches to data collection and analysis.  **Task 7 (presentations will begin after Easter holidays, w/c 20/4/20)**  1. Communicate research outcomes in an appropriate manner for the intended audience.  Ways to promote and disseminate research findings includes:   * Publication of findings in scholarly journals * Presentations at national or local professional conferences * Presentations in the classroom * Dissertation   **Evidence - submit Presentation and report with extended notes**  2. Coherently and logically communicate outcomes to the intended audience demonstrating how outcomes meet set research objectives.  3. Communicate critical analysis of the outcomes and make valid, justified recommendations.  **Task 8 (Date due 4/5/20)**  Reflect on the effectiveness of research methods applied for meeting objectives of the business research project. Also, consider alternative research methodologies and lessons learnt in view of the outcomes.  **Task 9**  Provide critical reflection and insight that results in recommended actions for improvements and future research considerations.  **Task 10**  Critically evaluate research methodologies and processes in application to your research project to justify your chosen research method/s and analysis.  **Task 11**  Demonstrate reflection and engagement in the resource process leading to recommended actions for future improvement of your project outcomes. Reflect on the success of your research project and your performance at the end of the project with the inclusion of a project evaluation and recommendations. |
| **Guidance for Students**    You should read this information before starting to define and work through your research brief. You should refer to these instructions as you complete work for this unit.     * Consider the development of a methodical and valid research proposal as the foundation for the project. * Choose a topic of personal interest in a specialism. The topic chosen should allow a sufficient and suitable degree of research through the existence of adequate background materials. * A good project proposal title should meet the following criteria:      * The proposal is one that has an existing body of literature or source material that can be reviewed.      * The proposal extends a current line of learning that will lend itself to further rigorous exploration. * Decide on appropriate research methods and select an appropriate sample.      * Ensure that your proposal is ethical, reliable and valid. An ethics form must be submitted prior to completion of research as part of the research proposal.      * Agree your research proposal with your tutor before beginning your research.      * Conduct your research as outlined in the proposal agreed with your tutor.      * Carry out your research, analyse your research findings and draw conclusions. Apply both qualitative and quantitative research methods to evaluate data collected from primary research.      * Communicate your research outcomes in a manner appropriate to your audience.      * You will be asked to reflect on the success of your research project and evaluate the problems/issues encountered.      * You must complete the research project in order to complete your work for this unit. |

Assessment Criteria

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| Learning Outcomes and Assessment Criteria | | |
| Pass | Merit | Distinction |
| **LO1** Examine appropriate research methodologies and approaches as part of the research process | | **LO1 & 2**  **D1** Critically evaluate research methodologies and processes in application to a computing research project to justify chosen research methods and analysis. |
| **P1** Produce a research proposal that clearly defines a research question or hypothesis supported by a literature review.  **P2** Examine appropriate research methods and approaches to primary and secondary research. | **M1** Evaluate different research approaches and methodology and make justifications for the choice of methods selected based on philosophical/theoretical frameworks. |
| **LO2** Conduct and analyse research relevant for a computing research project | |
| **P3** Conduct primary and secondary research using appropriate methods for a computing research project that consider costs, access and ethical issues.  **P4** Apply appropriate analytical tools, analyse research findings and data. | **M2** Discuss merits, limitations and pitfalls of approaches to data collection and analysis. |
| **LO3** Communicate the outcomes of a research project to identified stakeholders | | **D2** Communicate critical analysis of the outcomes and make valid, justified recommendations. |
| **P5** Communicate research outcomes in an appropriate manner for the intended audience. | **M3** Coherently and logically communicate outcomes to the intended audience demonstrating how outcomes meet set research objectives. |
| **LO4** Reflect on the application of research methodologies and concepts | |  |
| **P6** Reflect on the effectiveness of research methods applied for meeting objectives of the business research project.  **P7** Consider alternative research methodologies and lessons learnt in view of the outcomes. | **M4** Provide critical reflection and insight that results in recommended actions for improvements and future research considerations. | **D3** Demonstrate reflection and engagement in the resource process leading to recommended actions for future improvement. |

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| APPENDIX D – HARVARD REFERENCING SYSTEM |

**What is a Bibliography?**

A bibliography is a list of all the books, articles and non-book materials such as CD-ROM and World Wide Web/internet that you have used in preparing for your assignment. It appears at the end of your piece of work in alphabetical order by authors’ surnames.

**Why you should include a Bibliography**

It is essential to acknowledge the sources you have used for your assignment because of the following reasons:

* To avoid accusations of plagiarism
* To enable readers to retrieve more information about the subject by using your bibliography
* Support the basis of your research

**How to compile your Bibliography**

There are many different methods or systems for compiling bibliography. We recommend you to use the Harvard Referencing System.

Why Harvard? Harvard is one of the most widely used methods internationally and has advantages of simplicity, clarity and ease of use for both author and reader. Once a method has been chosen, it is important to use it consistently.

There are three styles in common use to highlight the key element of a reference; they are the use of bold text, underlining and italics. You should use only one of these techniques throughout your bibliography.

**The Harvard Referencing System**

In this system, the sources that you refer to in your text should be cited by author’s name followed by the year of publication in brackets e.g. Bell (1993). All references should then be listed alphabetically by author at the end of your work.

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| For **books,** you will need the following information:   * Author’s (or editor’s) first name (or initials) and surname * Year of publication * Edition (if not first) – see \* over for example * Title of book * Place of publication * Publisher’s name | For **Articles**, you will need the following information:   * Author’s first name (or initials) and surname * Year of publication; any other dates * Title of article * Name of journal, magazine or paper * Volume and part numbers * Page numbers |

Here is an example of a **book** entry, showing the correct layout, typeface and punctuation:

|  |  |  |
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| Surname first, then a comma, then first name or initials |  | Place of publication, followed by a comma |

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| Northedge, Andrew (1990) *The Good Study Guide,* Milton Keynes, Open University Press. |

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| Year of publication in numbers, in brackets, then edition no. (if not first) – see\* over. |  | Title in italics (if typed) or underlined (if hand-written), followed by a comma. |  | Name of publisher, then a full stop. |

Here is an example of a **journal** entry, with guidelines, as above:

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| Surname, then a comma, then first name or initials. |  | Article title in inverted commas, then a comma; capital letters only on first letter and proper name. |  | Volume and number  ( in brackets) plus a comma, then any other dates e.g. May, spring, plus a comma |

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| Peeke, G.H.(1984) *‘The teacher as researcher’,* *Educational Research*, 26 (1) pp.24–26. |

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| Year in numbers, in brackets |  | Name of journal in italics followed by a comma |  | p. or pp. with page numbers separated by a dash, then a full stop |

**Examples for using Harvard System**

**1. Books:**

Gates, B. (1996) The Road Ahead, Second edition, California, Penquin Books.

Smith, J. et al (1987) Building Construction Management, London, University of London Press.

(**note:** when there are three or more authors, add “et al” meaning “and others”)

Smith. H. (ed) (1990) How to write a C.V. London, Penquin Books.

(**note:** If this is an editor, add (ed) after the name)

National Curriculum Council (1990) Curriculum guidance 3: the whole curriculum. York, National Curriculum Council.

(**note:** If no author/editor available, organisation would be regarded as author)

**2. Articles in journals/periodicals AND newspaper articles:**

Graham-Rowe, D (2001) “Saving the Planet”, New Scientist, Vol.170 (2296). P4.

**3. Articles in books:**

Smith, J.R. (1983) “Coputers in the Classromm”, in Richard, J & Morris, R (ed) Computers in Education, Oxford, Pergamon.

**4. Government publications:**

Department of the Environment. (1986) Land filling wastes, London, HMSO.

**5. Videos**/**TV/Radio Programmes**:

Fragile Earth, (1985) South American wetland, Henley-on-Thames, Watchword Videos (VHS Video)

Voyage to the Antarctic, (1996) BBC, London, 27 September 1996

**6. CD-Roms:**

Lewis, J. (1994) “Elephants”. Collier’s Multimedia Encyclopedia. CD-Rom, Collier.

**7. World Wide Web/Internet Documents:**

Holland, M (1996) Harvard System, Poole, Bournemouth University. Available: [http://www.Bournemouth.ac.uk/service-depts/lis/LIS Pub/harvardsys.html](http://www.bournemouth.ac.uk/service-depts/lis/LIS%20Pub/harvardsys.html) (Accessed 22 August 1997)

If you can’t find the personal name/organisation responsible for the document , use “Title page” and Title of site instead.

“Writing a bibliography” (2000) The University of Sheffield. Available:<http://www.shef.ac.uk/library/libdocs/ml-rs11.html> (Accessed 4 September 2001)

**8. Electronic Journal Articles:**

Smith, J (1996) “Time to go home”. Journal of Hyperactivity (Internet) 12 October, 6(4), p122-3. Available: [http://www.Imu.ac.uk.html](http://www.imu.ac.uk.html/) (Accessed 6 June 1997)

**9. Interviews:**

Fletcher, Dorothy (1995) Interviewed by Jean Macbeth, 19 August